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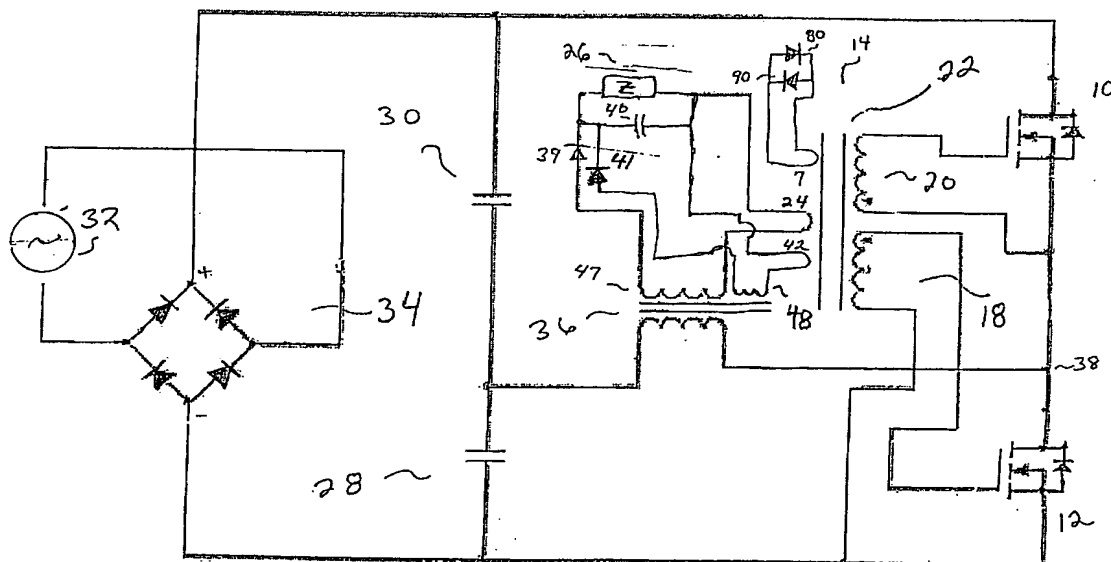
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(54) Title: ADAPTIVE RESONANT SWITCHING POWER SYSTEM



(57) Abstract: A resonant switching power system operates with two resonant frequencies. A first frequency depends on the sec-  
ondary leakage inductance of an output transformer and capacitor. The first frequency varies with changes in the load because load  
changes alter the leakage inductance. A second resonant frequency depends on the gate source capacitance of two MOSFET power  
devices in the circuit and the leakage inductance of the circuit's driving transformer. Power is thereby supplied that is always in phase  
with the load so that switching in the power supply occurs when current is near zero. High thermal efficiency is thereby achieved.

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